## Abstract

The present invention relates to Latrophilin (LPH) polynucleotides and polypeptides, and to identifying and treating subjects at risk for eye disease. Specifically, the present invention provides novel human LPH3 and LPH1 polynucleotides and LPH3 polypeptides, assays for detecting variations in LPH polynucleotides associated with eye disease, and methods and compositions for treating eye disease.